Inventors: Hoeffler, et al. Appl. Ser. No. 09/245,615

## In the Claims:

This listing of claims will replace all prior versions and listings of claims in the case.

## 1 - 88 (Cancelled).

## 89. (Currently amended): A kit comprising:

at least one antibody array, said antibody array comprising a plurality of discrete locations arrayed in a spatially addressable ordered matrix on a solid surface, wherein each of the discrete locations comprises one or more spots of an antibody bound to the solid surface, wherein two or more of the a plurality of the discrete locations contain different antibodies that are different from the antibodies of the other discrete locations:

a first detectable label for labeling a first protein sample;

optionally a second detectable label for detectably labeling a second protein sample, wherein the second detectable label is different from the first detectable label; and

instructions for using the kit to perform one or more of the following:

- identifying antigens in the first or the second <u>protein</u> samples that bind to one or more of the antibodies bound to the solid surface;
- ii. comparing the protein expression profiles of two or more protein samples;
- characterizing the first or the second <u>protein sample-samples</u> based on the protein expression profile thereof; and
- determining the effect of varying binding conditions on the affinity of the bound antibodies to antigens present in first or second protein samples.
- (Previously presented): The kit according to claim 89, wherein the array comprises up to about 600 discrete locations per square centimeter.
- (Previously presented): The kit according to claim 89, wherein the array comprises up to about 1000 discrete locations
- (Previously presented): The kit according to claim 89, wherein the array comprises at least 1000 discrete locations.

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- (Previously presented): The kit according to claim 89, wherein each spot contains between about 1
  ng to about 1 µg of antibody.
- (Previously presented): The kit according to claim 89, wherein the antibodies are covalently bound to the solid surface.
- 95. (Previously presented): The kit according to claim 89, further comprising a second antibody array.
- (Previously presented): The kit according to claim 89, wherein each detectable label is a fluorescent dye, biotin, an epitope tag or a colorimetric enzyme.
- (Previously presented): The kit according to claim 89, wherein each detectable label is a fluorescent dye.
- (Previously presented): The kit according to claim 97, wherein each detectable label is selected from the list fluorescein isothiocyanate (FTTC), fluorescein, rhodamine, tetramethyl-rhodamine-5-(and 6)-isothiocyanate (TRITC), Texas red, a cyanine dye, Cy3 and Cy5.
- (Previously presented): The kit according to claim 89, wherein each discrete location in the array comprises two or more discrete spots of an antibody bound to the solid surface.
- 100. (Previously presented): The kit according to claim 99, wherein each of the two or more discrete spots contains a different amount of antibody bound to the solid surface.
- 101. (Previously presented): The kit according to claim 99, wherein each of the two or more discrete spots contains the same amount of antibody bound to the solid surface.
- 102. (Previously presented): The kit according to claim 89, wherein each discrete location in the array comprises three or more discrete spots of an antibody bound to the solid surface.

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- 103. (Currently amended): The kit according to claim 89, wherein at least a portion of the discrete locations on the solid surface contain different antibodies.
- 104. (Previously presented): The kit according to claim 89, wherein at least a portion of the discrete locations on the solid surface contain the same antibodies.
- (Previously presented): The kit according to claim 89, wherein at least a portion of the antibodies bound to the solid surface are uncharacterized.
- (Previously presented): The kit according to claim 89, wherein at least a portion of the antibodies bound to the solid surface are characterized
- 107. (Previously presented): The kit according to claim 89, wherein the antibodies in each spot are independently polyclonal antibodies, monoclonal antibodies, antibody fragments, single claim antibodies, humanized antibodies or recombinant antibodies.
- 108. (Previously presented): The kit according to claim 89, further comprising an aqueous solution for incubating a sample with the antibody array.
- 109. (Previously presented): The kit according to claim 89, further comprising a blocking solution.
- 110. (Previously presented): The kit according to claim 89, further comprising a washing buffer.
- 111. (Previously presented): The kit according to claim 89, wherein the surface comprises one or more of a plastic, a complex carbohydrate, an acrylic resin, nitrocellulose, glass, silicon or nylon.